

Exhibit 11



Oregon

Kate Brown, Governor

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Shane Jeffries, Forest Supervisor
Ochoco National Forest
3160 NE Third Street
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RE: Forest Management Direction for Large Diameter Trees in Eastern Oregon #58050

Dear Supervisor Jeffries,

The Oregon Department of Fish and Wildlife (ODFW) is replying to your request for comments on the Draft Environmental Assessment (Draft EA): Forest Management Direction for Large Diameter Trees in Eastern Oregon (Amendment). ODFW's mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations, and the agency has statutory obligations to manage fish and wildlife resources of Oregon (Oregon Revised Statute [ORS] 496.012).

Since 1995, the U.S. Forest Service (USFS) has managed public forests east of the Cascade Mountains to maintain "old forest abundance" and "wildlife habitat in late and old structural stages" under provisions known as the "Eastside Screens" (Draft EA p 8). Scenario A of the Eastside Screens wildlife standard prohibits harvest of trees larger than 21-inches in diameter at breast height (dbh, or 4.5 feet above the ground). This "21-inch Rule" is meant to restore areas where Late and Old Structure¹ (LOS) forest is below the Historical Range of Variability² (HRV). However, research on Oregon's fire adapted forests has shown an increasing loss of old trees over the past 25 years (Draft EA p 32). As a result, the USFS is proposing to revise the 21-inch Rule.

This Amendment will impact the Deschutes, Fremont-Winema, Malheur, Ochoco, Umatilla, and Wallowa-Whitman National Forest Land Management Plans (Forest Plans), and more than nine million acres in eastern Oregon. While the Amendment addresses a key conservation issue, it is not a comprehensive modernization of Forest Plans which direct project-level management for each National Forest. Unfortunately, most are about 30 years old, and much has changed since their adoption. ODFW hopes the USFS understands that many other updates, in addition to the Amendment, are needed to address changes in science, resource needs, and management

¹"Multi-strata with Large Trees/Closed" or "Single Strata with Large Trees/Open" (1995 Interim Wildlife Standard/Draft EA, Appendix B)

²According to the REGIONAL FORESTER'S EASTSIDE FOREST PLAN AMENDMENT NO. 2:

HRV should be based on conditions in the pre-settlement era; however, 1900s photography may be acceptable.

practices in eastern Oregon National Forests. ODFW strongly believes that the Amendment should be integrated with the incremental revision of the six Forest Plans in the analysis area. This will better align forest management with goals and objectives that promote ecological, economic, and social vitality.

Regarding the Amendment's Purpose and Need, ODFW recognizes the importance of prioritizing both older forests as well as large trees in eastern Oregon, and that there may be more appropriate means of achieving this outcome than a single diameter threshold, such as the 21-inch Rule. In general, these forests (save for those at high elevations) have fewer old and large trees than they did a hundred years ago, but often more trees overall. This is because timber harvest removed many of the large trees, and exclusion of relatively frequent, low-intensity fire has interrupted the natural thinning process. As a result, younger trees (often white or grand fir) are crowding and weakening the remaining live ponderosa pine trees, making them more vulnerable to insect infestations and/or pathogen(s) that turn them, prematurely, into snags. Eastern Oregon forests are dramatically lacking of very large, old ponderosa pine trees, or "yellowbellies".

In addition, ODFW believes the Amendment's adaptive management approach has the potential to benefit forest health and restoration. "*Standards and Guidelines*" are important to provide measurable objectives and to ensure project-level management actions that trend toward desired future conditions. Unlike *Standards*, *Guidelines* allow for departure from the terms, as long as their purpose is met. Along those lines, ODFW currently cannot determine how the Amendment's decision-space will be bounded and applied to management activities associated with retaining and recruiting old trees and large trees, respectively. Local forest collaboratives and the science community can play an important part in evaluating size and age thresholds as a means to ensure adequate distribution of older forests. ODFW encourages the USFS to continue working with forest collaboratives in determining site-specific projects to create structural diversity and tree density variation at stand- and landscape-levels to meet wildlife habitat objectives and reduce high-severity fire risk.

ODFW strongly believes that a key part of the Amendment is a robust and detailed monitoring strategy, supported by appropriate research and directly connected to an adaptive management feedback loop. However, the Draft EA provides only a general framework for monitoring and evaluation, and lacks sufficient detail to ensure it will be implemented as intended or whether it will achieve its objectives with a high-level of certainty. In addition, ODFW cannot determine if the USFS will invest in this monitoring strategy; whether it will coordinate its monitoring with other agencies/partners; or whether it is committed to baseline monitoring needed to detect the effects of management actions as well as external drivers like climate change. Further, the Amendment should articulate the opportunities for enhancing monitoring efforts through engagement with forest collaboratives, state-level partners, tribes, and other interests.

In sum, ODFW is supportive of revising the 21-inch Rule, including the Proposed Action's intent to preserve old and large trees and address forest health and restoration on multiple scales. In addition, ODFW provides the following recommendations:

- **Provide more clarity and detail as to how the Amendment will "crosswalk" with comprehensive Forest Plan revision(s) to better address the overall management of the affected forests. This will facilitate consistent/compatible management across landscapes and the varied forest types in eastern Oregon National Forests.**

- **Develop a decision-making framework that provides project-level direction including “sideboards” to help managers consistently determine when and where the Proposed Action or Guideline should be applied, as well as circumstances that would allow for departure from the terms.**
- **Modify the Proposed Action’s definition of ‘large trees’ to any tree species \geq 21-inch dbh and use monitoring and adaptive management to adjust as necessary.**
 - According to the Draft EA (p 33), there are only about 6 trees larger than 20.9 inches dbh per acre in the analysis area. In addition, Douglas-fir, grand fir and white fir comprise only 38% of large trees and Douglas-fir have decreased 14% (Draft EA p 32-33). Tree species diversity is an important habitat component for many wildlife species (Bull et al. 2005, Bull et al. 2000, Gaines et al 2010, Hessburg et al. 2020, Lehmkuhl et al. 2006, Lorenz et al. 2015, Pilliod et al. 2006). What would be the effect on LOS if these tree species are retained for wildlife habitat?
- **Use culmination of mean annual increment (CMAI) to help identify ‘old trees’ by species and site class.**
 - CMAI is the age of a tree (or stand) at which the maximum annual growth of biomass peaks (Smith et al. 1997). The CMAI is a good approximation of when a tree (or stand) transitions from a young tree (or stand) to a mature tree (or stand). Even after this peak, a tree or stand continues to take on biomass. A later transition is when a mature tree (or stand) becomes an old (-growth) tree (or stand). Once the particular CMAI for a tree (or stand) is known, field observation can be used to determine if the tree is older or younger than the CMAI.
- **Provide more detail and clarification about monitoring and evaluation of the Amendment’s effectiveness, including connections to local forest collaboratives, state agencies, tribes, and other partners.**
 - Develop a monitoring/evaluation strategy through interagency coordination. Monitoring objectives should be prioritized and set by interagency needs using multi-scale analyses, including regional assessments, basin assessments, watershed analysis, and project analysis.
 - Add quantifiable parameters to the Draft EA’s monitoring description (p 11) that are measurable and include as much accuracy and precision as possible.
 - Expand effectiveness monitoring questions (Draft EA p 11) to include science-based thresholds that determine whether a size or age guideline should be adjusted. Involve ODFW and other ecologists/biologists in developing thresholds.
 - Integrate monitoring into the new guideline language (Draft EA p 10-11). This will increase certainty regarding achievement of adaptive management objectives.
- **Document a commitment to adequately fund and implement the Amendment’s monitoring strategy.**

➤ **Complete additional analyses to consider the landscape level effects from roads, recreation, grazing, and firewood collection, as well as forest structure and connectivity within the context of HRV and climate change.**

- As stated in Wisdom et al. (2000), “efforts to restore habitats without simultaneous efforts to reduce road density and control human disturbances will curtail the effectiveness of habitat restoration, or even contribute to its failure.”
- Appendix C (Draft EA p 153) includes an intent statement that emphasizes connectivity between LOS stands to reduce wildlife habitat fragmentation. How has this been implemented since 1995?
- Build on snag analysis to include abundance in relation to roads (Bate et al. 2007, Hollenbeck et al. 2013, Wisdom and Bate 2008).
- Use a future climate scenario relevant to eastern Oregon to inform forest structure modeling. For climate projections, there are statistical downscaling methods available (e.g., information from Oregon Climate Change Research Institute).
- Without these additional analyses, it is difficult to interpret the value of increasing the amount of Open LOS forest to wildlife species sensitive to habitat fragmentation and human disturbance.

ODFW hopes this Amendment process will position local land managers, communities, forest collaboratives, and the broader public to achieve the opportunities within today’s challenges to restore forest health in eastern Oregon. We submit these recommendations with that in mind, and anticipate the USFS will take great care in assimilating submitted comments into an improved final alternative. ODFW has a long history of positive working relationships with the USFS, and we and look forward to continued work with you on this process and other partnerships. In addition, we will continue to work closely with USFS staff at the Forest- and field-level within the analysis area, support local forest collaboratives, and provide technical assistance and resources to adjoining private landowners.

Thank you for the opportunity to comment. If you would like more information from ODFW, please contact Sara Gregory, ODFW Wildlife Habitat Biologist, 541-388-6147, sara.c.gregory@state.or.us.

Sincerely,



Bruce Eddy
East Region Manager
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Attachment (1): Literature Cited

Literature Cited:

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- Wisdom, M.J., 2000. Source habitats for terrestrial vertebrates of focus in the interior Columbia Basin: broad-scale trends and management implications (Vol. 485). US Department of Agriculture, Forest Service, Pacific Northwest Research Station.
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